

REMARKS

Claims 3-18, 21-23 and 27-31 are pending in this application, of which claims 9, 16, 18, 22-23 and 30-31 have been amended. No new claims have been added.

The Examiner has maintained from the previous Office Action all the prior art rejections of the pending claims based on various combinations of Hackett et al. and JP Pub '309.

In Applicants' previous response of July 24, 2003, it was argued, among other things, that the following distinctions exist between the claimed invention and Hackett et al.:

1. No predetermined value for the luminance in a luminance change portion is shown in Fig. 4. Fig. 4 of Hackett et al. appears to show only two (2) values of luminance.
2. The limitation in the last paragraph of claim 22 of the instant application may be interpreted to mean that "the part of the scanning line thus moves depending on the amount of the change in the luminance and the level of the luminance", as discussed on page 22, lines 3-5 of the specification. Hackett et al. fails to disclose this feature.
3. Hackett et al. fails to disclose the frequency domain emphasis circuit recited in claims 23-24 of the instant application.

Column 2, lines 44-48 disclose that the differences in luminance are passed to comparators 521, 522, where they are thresholded and converted to binary signals A and B. The

Examiner urges that this passage, therefore, discloses the “predetermined value for luminance” claimed in the present invention.

Applicants respectfully disagree. This passage is directed to only values of differences in luminance, and not to the values of the level of the luminance itself for each compared scanning line.

Thus, Hackett et al. fails to disclose items #1 and #2 above.

With respect to item #3 above, the Examiner urges that logic circuit 53 corresponds to the frequency domain emphasis circuit claimed in the instant application because it “emphasizes the whole frequency domain of the television”.

This is in contrast to the present invention, in which the frequency domain emphasis circuit emphasizes a “predetermined frequency domain of said movement control signal produced by said movement control circuit”, as recited in claim 23. The logic circuit 534 of Hackett et al. cannot be said to emphasize any particular “predetermined frequency domain”.

In summary, all independent claims in the present invention base the control of vertical movement of the scanning lines on both of:

1. the difference between the luminance of the scanning line and adjacent scanning lines, and
2. the level of luminance of the part of the scanning line of the object.

Hackett et al. is concerned only with the difference in luminance, and not the level of luminance.

It should be noted that claims 3, 21 and 27 are directed to scanning line modulation in a luminance change portion applied to bidirectional scanning (forward and backward deflection). Claim 3 recites a parallel scanning signal for making the foreword and backward scanning lines parallel and a movement control signal for controlling the movement in the vertical direction of the scanning lines are synthesized with each other and the synthesized signal are applied to a vertical velocity modulation coil.

This subject matter of the present invention produces the effect of miniaturization and reduction in cost because a vertical velocity modulation coil functions as a dual source for generating a magnetic field for velocity modulation in the vertical direction and for generating a magnetic field for parallel scanning.

The cited references fail to teach or suggest an arrangement for applying scanning line modulation in a luminance change portion to bidirectional scanning and sharing of the coil. Thus, claim 3 is not allowable over the cited references.

It is also respectfully submitted that claims 21 and 27 are patentable over the cited references for the same reason as that in claim 3. Claim 27 relates to a portion forming a waveform for supplying a current to a shared coil.

Claims 18, 23 and 31 are directed to scanning line modulation in a luminance change portion being combined with frequency domain emphasis.

The cited references fail to teach or suggest such a combination of scanning line modulation in a luminance change portion with frequency domain emphasis and adjuster that adjusts the extracted frequency domain.

Thus, the prior art rejections should be withdrawn.

In view of the aforementioned amendments and accompanying remarks, claims 3-18, 21-23 and 27-31, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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